# Survival and success rates of pressed single lithium disilicate, zirconia veneered and metal-ceramic crowns in the pre-molar and molar area: a pilot study

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The objective of this study is to compare the clinical performance of three different kind of restorations namely 2 types of all ceramic restorations (pressed lithium disilicate and veneered zirconia) and metal-ceramic restorations.

Ethical review	Approved WMO
Status	Will not start
Health condition type	Dental and gingival conditions
Study type	Interventional

# Summary

### ID

NL-OMON37769

**Source** ToetsingOnline

Brief title Survival and success rates of crowns in the pre-molar and molar area

# Condition

• Dental and gingival conditions

Synonym

crown

**Research involving** Human

### **Sponsors and support**

Primary sponsor: Universitair Medisch Centrum Groningen Source(s) of monetary or material Support: Ministerie van OC&W

### Intervention

Keyword: crown, Lithium disilicate, Metal-porcelain, Zirconia

### **Outcome measures**

#### **Primary outcome**

Main study parameters/endpoints:

- 1) survival rate of the restoration after 1, 3 and 5 years
- 2) success rate of the restoration after 1, 3 and 5 years

#### Secondary outcome

Secundary outcome parameters

- 1) soft tissue recession
- 2) pulp vitality / peri-apical radiolucency
- 3) plaque index
- 4) probing pocket depth

To be determined 2 weeks, 1, 3 and 5-years post-cementation,

# **Study description**

#### **Background summary**

Metal-ceramic restorations (NL: goud-porselein kronen) have been considered the \*gold standard\* for indirect tooth restorations. However, all ceramic restorations are used for a growing number of indications in dentistry today.

There are several all-ceramic systems available for the clinician to choose from. However little is known about the clinical efficacy of these new types of crowns.

#### **Study objective**

The objective of this study is to compare the clinical performance of three different kind of restorations namely 2 types of all ceramic restorations (pressed lithium disilicate and veneered zirconia) and metal-ceramic restorations.

### Study design

A randomized clinical trial

#### Intervention

A crown is made in the posterior part of the mandible or maxilla.

### Study burden and risks

None anticipated. No extra visits. Regular visits may be marginally longer because the research data are collected.

# Contacts

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# **Trial sites**

# **Listed location countries**

Netherlands

# **Eligibility criteria**

#### Age

Adults (18-64 years) Elderly (65 years and older)

### **Inclusion criteria**

- patient is in need of an indirect restoration in the pre-molar or molar region
- patient is over 20 years old;
- adequate oral hygiene can be maintained;
- patient is able to understand and sign an informed consent;
- there is ample ferrule

### **Exclusion criteria**

- medical and general contraindications for the procedures;
- decreased masticatory function due to physical disorders;
- severe bruxism;
- patients with active periodontitis or periapical lesions of the tooth to be treated.

# Study design

# Design

Study type: Interventional	
Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Treatment

### Recruitment

NL Recruitment status:

Will not start

Enrollment:
Type:

75 Anticipated

# **Ethics review**

Approved WMO	
Date:	03-04-2012
Application type:	First submission
Review commission:	METC Universitair Medisch Centrum Groningen (Groningen)

# **Study registrations**

# Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

### In other registers

**Register** CCMO

ID NL38161.042.11